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PROGRAMME OF WORK OF THE INTERGOVERNMENTAL WORKING GROUP OF EXPERTS ON INTERNATIONAL STANDARDS OF ACCOUNTING AND REPORTING: DISCUSSION OF ACCOUNTING AND REPORTING ISSUES IDENTIFIED AT THE EIGHTH SESSION

Accounting for and by joint ventures

Report of the Secretary-General

SUMMARY

Because of the increasing use of joint venture arrangements as a vehicle of investment, it is necessary to harmonize practices used in accounting for and by joint ventures. A joint venture is a contractual arrangement involving the co-operative efforts and utilization of the resources of two or more venturers to accomplish agreed-upon goals. In a joint venture, a contractual arrangement establishes joint control of the venture by the participating venturers. Three types of joint ventures can be identified: jointly controlled entities, jointly controlled operations, and jointly controlled assets. Accounting for jointly controlled operations and assets involves no controversy because these types of joint ventures are not separate entities. Thus, each venturer accounts for and records his participation in the joint operations and assets in his own accounting records as if it were part of his overall operations. Accounting for jointly controlled entities can best be done using the expanded equity method for jointly controlled incorporated entities, and using the proportionate consolidation method for jointly controlled unincorporated entities. Accounting by joint venture entities should follow the generally accepted accounting principles of the country where the joint venture operates; however, internationally acceptable accounting principles should be used as the benchmark.

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INTRODUCTION

1. In its traditional form, a joint venture is a co-operative arrangement between two or more parties (venturers) for the purpose of carrying out a single project and is usually dissolved upon completion of the project.

2. Joint ventures, in the sense in which the term is generally used in business today, are largely a post-Second World War development. Ordinarily, a joint venture denotes a strategic alliance whereby two or more parties combine their resources and skills in an economic activity with the objective of receiving benefits from it. The participants in a joint venture are generally referred to as parties, venturers, or partners. The joint venture can be a national or an international one, the latter being present if the participants come from different countries. Joint ventures have long been used in international business for expansion into markets, particularly in the developing countries. In recent years, joint ventures are being used as the principal vehicle for foreign direct investment in Eastern Europe and the USSR. However, in developed market economies, as business risks soar and competition grows, firms are embracing both national and international joint ventures with increasing frequency.

3. The characteristic features of joint ventures give rise to some very important accounting issues which need to be addressed by the accounting standard-setters. There are two sides of these accounting issues. One is accounting and financial reporting by the joint venture, and the other is accounting and financial reporting for joint venture investments by the venturers. The former becomes most acute when the national accounting systems and regulations of the venturers diverge considerably.

4. This report analyses the issues relating to accounting for and by joint ventures. The central objective of this analysis is to provide direction to the policy makers regarding standard-setting on joint venture accounting. Section I deals with the definition and types of joint ventures; section II addresses the issues relating to accounting by joint ventures; section III focuses on accounting issues and problems in international joint ventures; section IV reports generally accepted accounting principles in different countries regarding accounting for joint ventures; section V examines the various approaches of accounting for joint venture investments; and section VI contains possible conclusions.

I. DEFINITION

5. A joint venture is often defined as a contractual arrangement involving the co-operative efforts and the utilization of the resources of two or more venturers to accomplish agreed-upon goals. In a joint venture arrangement, the participating venturers generally decide major policies concerning the undertaking by mutual agreement. In most cases each of the participating venturers possesses "veto power" regarding major policy decisions of the venture. Also, in most cases, the joint venture agreement specifies the procedure of dispute resolution whenever there is a disagreement between the venturers. A joint venture undertaking may be a single project or a business enterprise.

6. Despite various attempts by scholars and jurists, a universally acceptable definition of a joint venture has not yet been established. This is mainly because no legally substantive distinction can be made between the joint venture and the business form which it takes. At present no body of case or statutory law recognizes the joint venture as a form of business organization to which an insular set of rules apply. Rather, despite arguments to the contrary, the joint venture is often evaluated for purposes of liabilities, fiduciary duties, and the like according to the standards of the legal pigeonhole into which it most nearly fits - be that a corporation, partnership, or some hybrid form.

7. The legal form chosen for a particular joint venture arrangement results from a consideration of the relationship desired by the participating venturers within parameters set by the objectives of the venture, enterprise law of the country of operation, tax law, business environment, and so forth. Thus, a joint venture may take the form of a partnership, a trust, undivided interests in an undertaking, or a corporation (limited liability company). Also, joint ventures are often created in the form of a contractual arrangement for carrying out specific activities without forming a separate organizational structure.

8. Regardless of the legal form of the undertaking, the characteristics of a joint venture which distinguish it from other ways of carrying out economic activities are:

(a) The participating venturers enter into a contractual arrangement, typically a written agreement;

(b) The participants, by that contractual arrangement (agreement), are given joint control of the undertaking which is the object of the joint arrangement.

9. It follows from the above that the only feature which distinguishes a joint venture from other forms of business arrangement is "joint control." In considering whether joint control exists, it is important to look at both the terms and the substance of the joint venture agreement. This agreement governs the relationship between the participating venturers and provides for joint control, irrespective of the size of the participants' contributions in the venture. It is worth mentioning here that the joint control of the undertaking stipulated by the agreement is not to be confused with the management control exercised by one of the participating venturers or an independent operator. In practice, the management of a joint venture undertaking may be either dominated by one of the venturers, or shared by all. This depends on the mutual understanding and joint venture arrangement between the venturers. A joint venture can exist even where all parties do not participate in the exercise of management control. This situation can occur where a passive investor holds a minority interest in the joint venture, or where a local investor (private or public sector) in a developing country forms a joint venture with a transnational corporation. However, the substance of the contractual arrangement may be that joint control effectively does exist as the participants need to co-operate with each other in order to achieve the joint venture's objective.

10. Management control is a complex phenomenon that can be quite distinct from the "joint control" of an undertaking envisaged by a joint venture agreement. Although majority ownership might enable a venturer to exercise some degree of control, it often does not ensure full control or even control over the venture's strategic activities. The critical concern of a joint venture arrangement is how the joint venture will be managed so that its objectives are achieved. Geringer and Woodcock, 1/ studying the control characteristics of joint ventures stated that, although majority ownership might provide a venturer with some control, it will rarely enable it to dictate all of the venture's decisions all of the time. If a venturer, either due to its majority ownership or due to its dominant role in management attempts to force its will upon its partners, the venture's prospects for long-term survival will be sharply diminished.

11. A number of studies have correctly pointed out that there is no necessary correlation between ownership and control of a joint venture. This is true in both developed and developing countries. For strategic reasons, the participating venturers may agree on the dominant management-control role to be played by a designated venturer. This does not necessarily mean that all other venturers lose the right to exercise control. A joint venture with the dominant management-control role played by one of the venturers may be termed as "dominant parent joint venture". Killing provided the following example of a dominant parent joint venture in Canada:

> A dominant parent joint venture was set up in Canada in the 1970s between a Canadian and an American firm. The Americans entered the venture because they did not want to go through the screening process of Canada's Foreign Investment Review Agency. The venture was to be a world-scale plant to produce a product with which the Americans had a long history. The Canadian firm knew nothing about the product, neither its technology nor its market. However, it made a capital contribution and became a 50-per-cent owner of the venture. The new company was staffed entirely by the American parent and managed by them. It was understood that, although the Canadian firm would have seats on the board, the board would not play an active decision-making role. Much of the venture's output was to be sold to other divisions of the US parent, and there was a provision in the joint venture agreement that the transfer price paid by the divisions would drop after the venture had earned a 30-per-cent return on assets. In effect, this put a limit on the return which could be earned by the Canadian partner. However, given the world leading expertise of the US firm and the promise of a low-cost plant, the Canadians felt that it was likely that their actual return on investment would be the maximum allowed for in the joint venture provisions. 2/

12. In the above example of a Canadian joint venture, both venturers had representation on the board. Although the Canadian venturer had the right to exercise control through its membership on the board, for strategic reasons the American venturer was allowed to control the management of the joint venture. In his study of joint ventures in developed countries (European and North American countries), Killing defined control in terms of the decision-making role of joint venture management, that is, whether it is an active or passive role. Here control was measured by administering a questionnaire in which managers were asked to

assess the "jointness" of decision-making regarding nine decisions: product pricing, product design, production scheduling, production process, quality standards, replacing a functional manager, budget sales target, budget cost targets, and budget capital expenditures. Scoring the responses allowed the venturers to be sorted into three categories:

(a) Dominant parent joint ventures in which one venturer had management control;

(b) Shared management ventures in which all the venturers played an active role;

(c) Independent ventures in which neither venturer played a strong role.

The result was that 4 of the ventures were independent, 13 were dominant and 20 were shared.

13. Beamish, reviewing the existing literature on joint ventures in developing countries, stated that local partners of joint ventures in developing countries are rarely passive shareholders. 3/ In analysing data as part of Harvard University's Multinational Enterprise (MNE) Project, Stopford and Wells reported that, 88 per cent of the MNE respondents indicated that the local partner typically had at least some voice in management. 4/ Schaan, studying the techniques that local and foreign parent companies use to control joint ventures in Mexico, found that all the ample joint ventures can be classed as having shared control. 5/

14. Schaan's in-depth study on international joint ventures in Mexico provides insight into the control aspect of joint ventures in developing countries. To an observer, apparently it may seem that an international joint venture in a developing country lacks the criterion of "joint control". But in reality it may not be true. Venturers often resort to various control mechanisms. Schaan categorized these control mechanisms into two main types. "Positive control mechanisms", which venturers employ in order to promote certain behaviour. These can be distinguished from "negative control mechanisms", which are used by a venturer to stop or prevent the joint venture from implementing certain activities or decisions. Positive control tends to be exercised through informal means, including staffing, reporting relationships and participation in the planning process. In contrast, the more bureaucratic negative control includes reliance on such devices as formal agreements, approval or veto by venturers and the use of the venture's board of directors.

A. Joint ventures as defined by various standard-setting bodies

15. The Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting, in its Conclusions on Accounting and Reporting by Transnational Corporations, published in 1988, states (para. 50):

For the purpose of the present document, the term "joint venture" denotes shareholdings in a business entity having the following characteristics:

(i) The entity was established by a contractual arrangement (usually in writing) whereby two or more parties (the venturers) contributed resources towards the business undertaking;

(ii) The venturers have joint control over one or more activities carried out according to the terms of the arrangement and none of the individual investors is in a position to control the venture unilaterally.

16. The International Accounting Standards Committee (IASC), in its IAS 31 "Financial Reporting of Interests in Joint Ventures", published in December 1990, provides the following definitions (para. 2):

(a) A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity which is contractually subject to joint control;

(b) Control is the power to govern the financial and operating policies of an economic activity so as to obtain benefits from it;

(c) Joint control is the contractually agreed sharing of control over an economic activity.

17. The Accounting Standards Committee of the United Kingdom, in its Exposure Draft 50, titled "Consolidated accounts", published in June 1990, provides the following definition (para. 84):

A joint venture is an enterprise set up by its participants to achieve some mutual purpose or benefit. It is controlled jointly by two or more venturers, according to their joint venture agreement.

18. The Canadian Institute of Chartered Accountants (CICA) Handbook section 3055, defines a joint venture as follows (paras. 03 and 04):

A joint venture is an arrangement whereby two or more parties (the venturers) jointly control a specific business undertaking and contribute resources towards its accomplishment. The life of the joint venture is limited to that of the undertaking which may be of short or long-term duration depending on the circumstances. A distinctive feature of a joint venture is that the relationship between the venturers is governed by an agreement (usually in writing) which establishes joint control. Decisions in all areas essential to the accomplishment of a joint venture require the consent of the venturers, as provided by the agreement; none of the individual venturers is in a position to unilaterally control the venture. This feature of joint control distinguishes investments in joint ventures from investments in other enterprises where control of decisions is related to the proportion of voting interest held.

19. The Financial Accounting Standards Board (FASB) in the United States has been working on a consolidation project for the past several years. The FASB Advisory Group on Joint Ventures and the Joint Ventures Team consisting of FASB members and staff, in several separate and combined meetings, have discussed issues relating to accounting for investments in joint ventures. The minutes of these meetings indicate that there is an agreement on the following matters:

(a) A joint venture may be a jointly controlled legal entity, or an unincorporated undertaking in which all the participating venturers hold undivided interests;

(b) A jointly controlled entity is not part of the reporting entity of the investor (venturer) because a joint venture cannot be exclusively controlled and would not be consolidated. 6/

B. Types of joint ventures

20. Considering the nature of joint venture arrangements, joint ventures can be classified as belonging to one of the following types: jointly controlled entities; jointly controlled operations; jointly controlled assets.

1. Jointly controlled entities

21. The participating venturers create a separate economic entity. The capital contribution on the participating venturers, profit-sharing and operating policies of the venture are governed by the joint venture arrangement. The entity has its own organizational structure and its legal form may be either corporation, partnership, or any other form of business organization. Generally, jointly controlled entities may be divided into two forms: incorporated and unincorporated. The incorporated entities - i.e., corporations - are juridical persons. An incorporated entity owns assets, incurs liabilities and expenses, and earns revenues in its own name. Being a legal person, an incorporated entity has the right to enter into contracts in its own name, it can sue and it can be sued. Ordinarily, an unincorporated entity is not treated as a legal person. Although the unincorporated entity can, in its name, acquire assets, incur liabilities, and conduct business operations, from a legal point of view the owners of the entity are directly and proportionately in control of all the assets and liabilities. The national law of some countries recognizes some forms of unincorporated entities as legal persons. Under such circumstances, an unincorporated entity may possess many of the characteristics of an incorporated entity. In some cases a portion of the equity capital of a jointly controlled entity may be subscribed by individuals or organizations who do not participate in the joint control of the entity; however, the entity is jointly controlled by two or more other venturers. The non-controlling share subscribers hold an investment in the joint venture that is similar in substance to any other investment in another entity.

2. Jointly controlled operations

22. In these situations no separate entity is formed. Instead, parts of the venturers' existing enterprises work on a common project and co-ordinate their activites. The organizational structure remains flexible. In some cases joint "project teams" are formed, in other responsibilities are delegated as and when the need arises. The distinctive feature of this type of joint venture is that the assets and expertise assigned by each venturer for the joint venture activity remain under direct control of the venturer who assigns them. The participating venturers perform their respective parts of the joint venture activity using their own resources. The benefits are shared by the venturers on an agreed basis. Examples of joint venture operations include those joint venture arrangements under which the venturers jointly produce, market and distribute a particular product using each venturer's resources such as its property, plant and equipment, technical expertise and employees.

3. Jointly controlled assets

23. Although these are not separate legal entities, the resources contributed by the participating venturers are combined together for the purpose of a joint venture project which is managed either by one managing venturer typically known as operator, or by a joint management team. The joint venture agreement defines the responsibilities and obligations of the operator, the interests of the parties etc. The distinctive feature of a joint venture of this type is that each venturer possesses an undivided interest in its assets. The costs of running the project are shared by the participating venturers on an agreed basis; each venturer usually takes a portion of the output of the joint venture. This type of joint venture arrangement is prevalent in the extractive industries (e.g., oil, gas and minerals). An example of a jointly controlled assets venture is where two or more oil exploration companies enter into a joint arrangement to undertake oil exploration or to build an oil pipeline.

II. ACCOUNTING BY JOINT VENTURES

24. The accounting and financial reporting by a joint venture depends on its organizational form and characteristics. Many joint venture enterprises develop their own accounting system within the framework of generally accepted accounting principles of the country of operation. Although different countries have different accounting standards, in the case of international joint ventures, it is necessary that the accounting practices of these joint ventures not only conform to the national accounting standards of the host countries but also provide useful information for the foreign venturers. This can best be accomplished by using internationally accepted accounting standards. Below the accounting procedures in the case of each of the three types of joint ventures are described.

A. Accounting by jointly controlled entities

25. The formation of a jointly controlled entity is a transaction in which the ownership interest in the venture is exchanged for whatever consideration is received from the participating venturers. If all the venturers provide cash for ownership interest in the joint venture, the accounting for preparation of the opening balance sheet of this enterprise is fairly simple. If the venturers contribute only non-monetary assets (assets other than cash) or cash plus some non-monetary assets, the fair market value of each non-monetary asset needs to be estimated. An independent appraisal of the non-monetary assets may be required in cases where their values are not apparent from other sources. After preparation of the opening balance sheet of the jointly controlled entity, normal accounting in accordance with the generally accepted accounting principles in the country of operation is applied to the future transactions.

26. The legal form of a jointly controlled entity determines the procedure of financial reporting by the joint venture. If it is a partnership, the financial accounting and reporting procedure of the entity should follow the established procedure for partnership accounting. Accordingly, the financial statements of a partnership form of a joint venture entity should include a "statement of venturers' capital" showing each venturer's capital account balance at the beginning of the accounting year, plus venturer's share of the net income for the year, plus (if any) new capital contribution by the venturer during the year, and minus any withdrawal by the venturer during the year. The ending balance of each venturer's capital account shown in the statement of venturers' capital, should be reported against each venturer's name in the "venturer's capital section" of the balance sheet.

27. If the jointly controlled entity is an incorporated one, i.e. a corporation, its financial reporting and accounting procedures should follow the conventional or legal requirements on corporate accounting in the country of operation. In the case of financial reporting by international joint ventures, international standards are to be taken as "benchmarks" which will be adjusted or modified to suit the local environment.

B. Accounting by jointly controlled operations

28. The activities of a jointly controlled operation are delegated to the participating venturers, and each venturer carries out its part of the activities using its own resources. In this type of joint venture, no separate accounts of the joint venture operations are prepared. Therefore, the question of accounting by joint ventures does not arise. Each venturer maintains accounting records for its part of a joint venture operation, which will be discussed in section IV covering accounting for joint ventures.

C. Accounting by jointly controlled assets

29. These joint ventures normally maintain separate accounting records of the expenses incurred for the undertaking, and the resources received from and the outputs delivered to the joint venture participants. These accounting records are maintained by the operator of the undertaking. In most cases, the joint venture agreement may include an accounting agreement. The main provisions of the accounting agreement encompass the approval, funding, reporting, allocation, charging and audit of expenditures applicable to the joint venture.

30. Generally, the operator is given authority to commit and incur expenditures by virtue of an approved AFE (authority for expenditure) within the agreed work programme and budget. An AFE covers a particular activity. In a joint venture for oil exploration, for example, it may cover an exploration well or the construction of part of the production facilities. The AFE is normally broken down and reported against controllable cost categories. As a result, a measure of control is exerted by the venturers (non-operators), whilst allowing the operator the flexibility to perform the task. Any revisions to the work programme and budget are to be approved by the venturers periodically.

31. During the various stages of joint venture activity, the operator will receive cash and non-cash resources from the participating venturers. The operator will make cash calls on the venturers and will deposit the funds into bank accounts under joint names of the venturers. The operator will have the authority to operate these joint bank accounts. Disbursements will be made by the operator from these bank accounts. If the operator is one of the venturers, financial operations of the joint venture undertaking must be segregated from its financial operations of other areas of involvement.

32. The accounting agreement for a joint venture involving joint venture assets, normally lays down procedures for reporting back to the venturers, on a monthly basis, expenditures, commitments, estimated total expenditures against budget, cash balances, accruals, etc. This information needs to be in sufficient detail for venturers to review the current management, and also for them to use information as appropriate in their own financial statements.

33. The accounting agreement generally specifies how the various costs are to be allocated between the participating venturers. In accordance with the agreement, at regular intervals, the operator sends bills to the individual venturers for their respective shares of the total joint venture costs. The simplest form of allocation is where each partner has a fixed equity interest. After inception of the joint venture the percentage interests of the venturers may change. The cost allocation is adjusted to reflect these circumstances.

34. Another level of allocation is accounting for the income or tariff derived from joint venture activity for the use of its assets by enterprises other than the joint venture participants. For example, an outside oil exploration company may wish to use the oil pipeline system of a joint venture for a tariff based on each barrel of throughput. The arrangement may suit the existing pipeline owning joint venture because the production from their own field may be in decline. With the

high investment in oil pipelines, a great deal of thought, effort and negotiation is required to effect an arrangement between the pipeline owners and the outsider; these arrangements are now becoming more commonplace. Procedures for allocating these revenues to the participating venturers of jointly controlled assets need to be agreed by all the venturers.

35. If the operator is one of the venturers and some of its own resources are used for joint venture activity, there may be some problems in charging expenditures to the joint venture. There is no problem with direct expenditures, so long as the operator's accounting system can clearly identify the costs to a particular joint venture. Problems may arise over the amount to be charged to the joint venture for the services of facilities and staff of a large operator involved in many activities. There is no fixed method for charging expenditures. It is up to the participating venturers to come to an equitable arrangement. However, an underlying principle in a cost sharing arrangement should be that the operator neither loses nor gains by virtue of acting in that capacity.

36. In most cases, the agreements for the jointly controlled assets contain provisions for audit mechanisms. Thus, the participating venturers are able to review and check in detail the information substantiating the expenditure reports submitted by the operator. Instead of performing individual audits, it is the usual practice for the participants to provide members for a joint audit team to visit the operator's premises. Any points of dispute regarding allocation of costs to the venturers, charging of expenditures to the joint venture, cash balances, etc. are normally resolved without resort to the arbitration clause of the joint venture agreement.

III. ACCOUNTING ISSUES AND PROBLEMS IN INTERNATIONAL JOINT VENTURES

37. When venturers from different countries form a joint venture to operate in a country, it takes on the character of an international joint venture. Often venturers from developed market economies form joint ventures with public or private sector enterprises in developing countries and in Eastern Europe and the USSR. Moreover, international joint ventures within developed market economies are quite common practices. Many of the international joint ventures are joint venture entities. In an international joint venture, venturers encounter accounting problems arising from differences in the accounting environments in the home and host countries. The accounting environment is influenced by the existence of generally accepted accounting principles, auditing practices and the competence of the professional accountants. These problems are relatively insignificant in the international joint ventures operating in developed market economies. However, they can be severe where accounting environments differ markedly.

38. Many developing countries do not have an institutional framework for setting accounting standards. Consequently, diverse accounting practices are prevalent in these countries. Under such circumstances in a developing country, a foreign venturer may instill its own accounting system in the international joint venture. This may, however, give rise to some problems from the perspective of the host-country venturer(s) and public policy makers. This is because the accounting

objectives in the host country and in the foreign venturer's home country may be different. This problem may not be completely overcome until international harmonization of accounting standards is achieved.

39. When a Western venturer forms an international joint venture with counterparts in Eastern Europe and the USSR, some acute accounting problems may arise. Traditionally, the objective of accounting in these countries was to provide information for national planning and public policy-making. On the contrary, Western accounting systems provide information for decision-making by various interested parties including investors, creditors, customers, suppliers and public-interest groups as well as home and host Governments. When Governments require joint ventures to follow the same accounting regulations as State-owned enterprises, Western venturers encounter various problems. This is mainly because of the fact that the concepts of assets, liabilities, revenues and expenses as applied to State-owned enterprises, significantly differ from those in the West. Because of these differences, the operating results and financial position of a joint venture in Eastern Europe and the USSR may differ from what they would have been according to the generally accepted accounting principles in the West. Consequently, from the perspective of Western venturer's home-country accounting and financial reporting, some serious accounting problems may arise in reconciliation of accounts. This situation is rapidly changing. Most countries in Eastern Europe and the USSR are considering modification in their accounting systems and regulations in order to increase compatibility with Western systems and regulations.

40. The traditional accounting model which was developed in the USSR and later transmitted to other Eastern European countries, has the following unique characteristics:

(a) Mismatch between recognition of revenues and expenses because - accrual accounting principles are not applied;

(b) Lack of distinction between "product cost" and "period cost" in the calculation of cost of production;

(c) Price changes are not taken into account which might decrease the value of current assets (e.g., inventory);

(d) Complicated accounting for the acquisition of fixed assets whereby the impact of transactions on the source of financing must be shown; accounting for depreciation is cumbersome;

(e) Provisions for uncollectible accounts receivable (bad debts) or provisions for potential future obligations, are not allowed;

(f) Fund accounting, that is, the creation of various funds by transferring before-tax and after-tax profits, is an established practice; this gives rise to the possibility of creating "secret reserves" which is not permitted under the acceptable accounting practices of many countries including Australia, Canada, the United Kingdom and the United States.

41. In view of the problems encountered by Western venturers, in 1985 China introduced new accounting regulations for joint ventures which are compatible with internationally acceptable accounting practices. In 1988 Hungary also restructured its accounting regulations to enable joint ventures to follow internationally comparable accounting practices. Czechoslovakia and Poland are introducing new accounting regulations which will follow the EC directives. In June 1989, the USSR Ministry of Finance invited the United Nations Centre on Transnational Corporations to jointly form an international Task Force to advise and assist the Soviet accounting policy-makers on new accounting regulations for joint ventures, co-operatives and State enterprises.

IV. ACCOUNTING FOR JOINT VENTURES

42. When accounting and reporting for interests in joint ventures, it is essential that each venturer reflect the substance of the joint venture arrangement whatever its structure or form. The procedures of accounting for the three types of joint ventures are discussed below.

A. Accounting for jointly controlled entities

43. The basic issue in accounting for investments in jointly controlled entities relates to the choice of method of reporting the investments in the financial statements of participating venturers. The choice of method determines the amounts reported for the investment in the balance sheet and the manner in which operating results from the investment is reported in the income statement. Some argue that the legal form of a jointly controlled entity should not govern the choice of method. 8/ This argument is valid from the point of view of the accounting principle of "substance over form". However, in the case of a joint venture, the form and substance of the venture are inseparable, and the form is usually decided by the substance of the joint arrangement, and vice versa.

44. In order to accomplish the objectives set out in the joint venture arrangement, a jointly controlled entity may be either incorporated or unincorporated. In a corporate joint venture each of the participating venturers hold an interest represented by some proportion of the venture's capital. The joint venture is a separate legal entity (juridical person) and holds the title of the assets and liabilities of the venture. However, an unincorporated joint venture generally may have no legal persona to own the assets and the liabilities used in the venture. The assets and liabilities of an unincorporated joint venture, therefore, are usually owned directly and proportionately by the participating venturers. Since the existence of a legal personality in an incorporated joint venture establishes an indirect relationship between the investing venturer and the assets and liabilities of the venture, it may not be appropriate to account for such investments in the same way as for investments in unincorporated joint ventures where a direct relationship exists between the investor and the assets and the liabilities of the venture.

45. Accounting literature on consolidation, investments and joint ventures discusses the following possible methods of accounting for investments in joint venture entities:

(a) Full consolidation method;

(b) Equity method;

(c) Proportionate consolidation method;

(d) Expanded equity method;

(e) Cost method.

1. Full consolidation method

46. The full consolidation method which is ordinarily referred to as consolidation, is appropriate under the circumstances where the investor owns the majority of voting stock (more than 50 per cent) of the investee. The investee is a legal entity in which investment has been made. In this case the investor holds majority controlling interest and it has the ability to control unilaterally the financial and operating policies of the investee.

47. Under the consolidation method, the specific assets and liabilities of the investee are included in the consolidated balance sheet of the investor, and the specific revenues and expenses of the investee are included in the investor's consolidated income statement. Thus, the consolidated financial statements of the investor are prepared. That portion of the investee's net assets (assets minus liabilities) and earnings allocable to other investors is shown in the consolidated financial statements as minority interest (a quasi-liability in the balance sheet, and a quasi-expense in the income statement).

48. The principal advantage attributed to the full consolidation method is that it reflects the full scope of operations and financial position as an integral part of the investor's financial statements with outside interest treated as a minority. The principal disadvantage of this method is that it shows assets and operations that are not under the direct control of the investor as if they were.

49. The full consolidation method meets the requirements of generally accepted accounting principles when one of the investors is in control. The control aspect of a joint venture arrangement, however, makes full consolidation inappropriate for reporting investments in jointly controlled entities. As mentioned earlier, the joint venture arrangement for a jointly controlled entity precludes unilateral control by any of the venturers. According to the definition of a joint venture, given earlier, majority ownership interest of any one venturer does not necessarily establish majority control of that venturer. Therefore, the use of full consolidation in accounting for jointly controlled entities seems inappropriate.

2. Equity method

50. The equity method is used when the investor has the ability to exercise "significant influence" over the investee. A "significant influence" is normally presumed to exist when the investor has 20 per cent or more ownership interest in the investee. The main principle of the equity method is that the initial investment is recorded at cost and reported as a one-line item in the balance sheet of the investor. This is why this method is sometimes called one-line consolidation. The investment is increased (decreased) by the investor's proportionate share of profit (loss) declared by the investee. When a dividend is received by the investor, the investment amount is reduced by the amount of dividend received. At the time of preparing the investor's financial statements, if any difference is observed between the carrying value of the investment and investor's proportionate share of the net assets reported in the financial statements of the investee, such a difference should be amortized.

51. The equity method has some advantages. It is a simple method. It is an acceptable practice for reporting investments in non-controlled entities and it is widely used throughout the world. It generally reflects that the investor (who does not have majority control over the investee) has only a net exposure to the liabilities of the investee by presenting the investment as a net position. Under the equity method, the investor's share of the net income of the investee is recognized as the income of the investor in the accounting period in which the net income is earned by the investee.

52. Some of the disadvantages attributed to the equity method in the case of accounting for investments in jointly controlled entities are:

(a) It tends to obscure the nature and volume of the business of a venturer that conducts significant operations through jointly controlled entities;

(b) It excludes from the venturer's financial statements assets and liabilities essential to the conduct of the venturer's business operations through jointly controlled entities;

(c) It excludes from the income statement elements of revenue and expenses arising from the operations of the jointly controlled entity, that may be a significant aspect of the venturer's operations;

(d) It is not informative about the economic effect of the venturer's investment in and commitment to jointly controlled entities with thin equity and heavy debt financing.

53. Because of the increasing use of jointly controlled entities to conduct business activities that are integral part of the operations of the participating venturers, as well as their potential for off-balance-sheet financing, the equity method does not seem to reflect the economic realities of joint venture arrangements. An appropriate method of accounting for investments in jointly controlled entities is necessary that provides more useful information about the operations, the financial resources of the venturer and the risks to which they are subject.

3. Proportionate consolidation method

54. Under the proportionate consolidation method, an investor consolidates in its financial statements its proportionate share of each asset, liability, revenue, and expense item of an investee. Some of the advantages attributed to the proportionate consolidation method of reporting investments in jointly controlled entities are:

(a) It provides information in a venturer's financial statements on past and prospective changes in the economic resources and obligations of a venturer that is useful to present and potential stockholders and creditors;

(b) It reflects significant economic relationships between the venturer and the jointly controlled entity, such as complementary or integrated operations and obligations through direct or indirect guarantee or support agreement;

(c) It recognizes that a part of the assets, liabilities and operations of a joint venture enterprise is under control of a venturer.

55. The proportionate consolidated method assumes that the individual venturers directly control a portion of the assets and liabilities of the jointly controlled entity. As mentioned earlier, this may be true for unincorporated jointly controlled entities. The assets and liabilities of an incorporated entity are owned and directly controlled by the entity itself. The owners possess an ownership interest in the entity. In the absence of a contractual arrangement which establishes joint control, the owner who has a majority ownership interest in an incorporated entity is in a position to exercise unilateral control over the assets and liabilities through its unilateral controlling power over the entity. If a contractual arrangement (joint venture agreement) establishes "joint" control of the incorporated entity (venture) by the participating venturers, no individual owner (venturer) has the ability to exercise unilateral control over the entity as well as over the assets and liabilities directly controlled by the entity itself. Under such circumstances, the use of proportionate consolidation method for reporting interests in jointly controlled incorporated entities has some disadvantages; for instance:

(a) By combining the venturer's proportionate share of the jointly controlled entity's balance sheet items with its own balance sheet items, the proportionate consolidation method implies that the venturer has the legal right to use or dispose of all the reported assets or to settle all the reported liabilities. In the case of a jointly controlled incorporated entity, the legal right to dispose of assets and settle liabilities lies with the entity itself and control of the entity is shared by other venturers;

(b) The use of proportionate consolidation for reporting investments in jointly controlled incorporated entities can cause users of financial statement to be misled as to the availability and distribution of assets and liabilities that would be reported by a venturer;

(c) It is also not clear that proportionate consolidation is more informative to users than the equity treatment used to account for significant long-term investment. Thus, given the complexity of the proportionate consolidation method its costs might outweigh its benefits.

4. Expanded equity method

56. Under the expanded equity method, an investor presents its proportionate share of the assets, liabilities, revenues and expenses of the investee in its consolidated financial statements, but as separate line items and without combining these amounts directly with its "own" assets, liabilities, revenues and expenses. The balance sheet items like current assets, current liabilities, property, plant and equipment, intangible assets, and long-term liabilities are shown in two separate lines - one line showing the amount representing the item directly controlled by the investor (investor's own and consolidated amount), and the other line showing the amount representing investor's proportionate share of the item in the balance sheets of the jointly controlled incorporated entities. Similarly, for revenues and expenses, two separate line items are presented in the consolidated income statement.

57. The expanded equity method of accounting for investment in jointly controlled entities has most of the advantages and disadvantages attributed to the proportionate consolidation method but avoids the combination of assets, liabilities and operations directly owned and controlled with the portion of assets, liabilities and operations over which the investor does not have complete control. Two important advantages of the expanded equity method in reporting investments in jointly controlled incorporated entities are:

(a) It distinguishes assets, liabilities, revenues and expenses completely controlled by the venturer, from those represented by the venturer's interest in the jointly controlled venture's assets, liabilities, revenues and expenses;

(b) It provides more meaningful information about the venturer in both the balance sheet and income statement that may enable users to get a better perspective of the venturer's financial position.

5. Cost method

58. Under the cost method, an investor records its investment at cost, and reports the investment as a single-line on its balance sheet. Profits earned by the investee are not recognized in investor's accounts until such profits are distributed as dividends. The investment account continues to be carried in the balance sheet at the initial cost of the investment. When dividend is distributed by the investee, the investor recognizes its share of the dividend as current income. Dividends received in excess of investor's share of earnings subsequent to the date of investment are considered a return of investment and are recorded as reductions of the cost of the investment. Compared to the equity method, one major

shortcoming of the cost method is that it is not consistent with the accrual concept of accounting and it does not report earnings and losses on a timely basis.

59. The cost method of accounting for an investment in another entity is normally used in circumstances where the investor neither controls nor has the ability to exercise significant influence over the investee. Considering the fact that venturers' joint control is the most fundamental characteristic of a joint venture arrangement, the use of cost method in accounting for investments in jointly controlled entities may not be appropriate under normal circumstances. However, there may be circumstances in which a venturer may not be in a position to exercise its rightful control over an international joint venture because of political instability or severe and prolonged foreign exchange restrictions in the host country. Also, for various reasons, there may be uncertainty about the safety of the assets invested in a host country. Under such circumstances, the cost method may be used in compliance with the accounting convention of "conservatism".

B. Accounting for jointly controlled operations

60. In the case of jointly controlled operations, the participating venturers use their assets and other resources for the purpose of joint venture activity. Normally, no distinction is made between the assets and other resources used for the venturer's own activities and for the joint venture activity. There are usually no separate accounting records or financial statements for the jointly controlled operation although the venturers may prepare memorandum accounts for management control purposes.

61. Since a venturer carries out its part of the jointly controlled operations in the same way as it would have done for its own operations, each venturer retains in its accounting records and, hence, recognizes in its financial statements the assets that it controls. It also includes in its accounting records the liabilities and expenses that it incurs in respect of the jointly controlled operations and the revenue that it earns from the sale of its share of production. These liabilities, expenses and revenues are recognized along with the venturer's own liabilities, expenses and revenues in its financial statements.

62. If the involvement of a venturer in jointly controlled operations constitutes a significant part of its operations, that fact should be disclosed in the notes to the financial statements. The disclosure should include the financial implications of such involvements in terms of the volume of business activities. If any significant liability is incurred for undertaking the venturer's part of jointly controlled operations, that should be disclosed.

C. Accounting for jointly controlled assets

63. This type of joint venture is not a separate entity. Each venturer owns directly a specified share of the jointly controlled assets. This type of arrangement is often described as an undivided interest. Each venturer includes in its accounting records its own share of the jointly controlled assets. It also

records liabilities that it has incurred in raising finance for the purpose of the joint venture activity and its share of those liabilities that it has incurred or guaranteed jointly with other venturers. Each venturer recognizes these assets and liabilities by combining these items with those of its own in its balance sheet. This treatment reflects both the substance and, the legal form of the joint venture arrangement. The participating venturers own directly the assets and are responsible for the liabilities of the joint venture, rather than holding an interest in a separate entity.

64. The products of this type of joint ventures are usually divided among the participating venturers in accordance with an agreed proportion. A venturer is at liberty to dispose of its share of the products in any manner it wishes. Each venturer includes in its accounting records and, hence recognizes in its income statement, revenues from the sale of its share of the joint venture's products together with its share of the expenses incurred by the joint venture. If a venturer incurs any expenses in financing its interest in the joint venture and for selling its share of the joint venture's products, these are recognized in the venturer's financial statements.

65. It is preferable to disclose in notes to the venturer's financial statements the aggregate carrying amounts of each category of assets and liabilities that are dedicated to the activities of jointly controlled assets. Also, the venturer should disclose its share of any contingent liabilities of the joint venture. The responsibility of the venturer, if any, for the other venturer's share of contingent or direct liabilities, should also be disclosed.

D. Practices in selected countries

66. The growth of joint venture activities over recent years has led a number of countries to set national accounting standards for accounting for interests in joint ventures. The standard setting process is still in progress in many countries. An attempt is made in the following paragraphs to present the current status of the generally accepted accounting practices for accounting for interests in joint ventures in selected countries.

1. Australia

67. The prevalent practice in accounting for interests in joint ventures in Australia is the proportionate consolidation method. The use of the equity method and the cost method can also be found in Australia. The Australian accounting profession has issued a standard (AAS 19) on accounting for investments in unincorporated joint arrangements. AAS 19 deals only with unincorporated contractual associations, other than partnerships and trusts, between two or more parties to undertake a specific business project in which the venturers meet the costs of the project and receives share of any resulting output.

2. Canada

68. The Canadian Institute of Chartered Accountants (CICA) handbook provides comprehensive coverage of the issues related to accounting for joint ventures. Section 3055 of the handbook, "Investments in corporate and unincorporated joint ventures", provides that investments in joint ventures should normally be accounted for by the equity method, or when a significant portion of the venturer's activities is carried out through joint ventures, by either the equity method or proportionate consolidation. The section also states that, if the earnings of the joint venture are unlikely to accrue to the venturer, the cost method of accounting for the investment should be used.

69. Paragraph 3055.26 of the CICA handbook states:

(i) If an investment in a joint venture is accounted for by the equity method and a significant portion of the venturer's activities is carried out through joint ventures, disclosure should be made in summary form of the venturer's share of the assets, liabilities, income and expenses of the venture. This information would usually be presented on a combined basis for such joint ventures.

(ii) If an investment in a joint venture is accounted for by the proportionate consolidation method, disclosure should be made in summary form of the venturer's share of the assets, liabilities, income and expenses of the venture. This information would usually be presented on a combined basis for such joint ventures. (If substantially all the activities of an enterprise are carried out through the medium of joint ventures, a statement to this effect would be sufficient disclosure.)

70. Paragraph 3055.30 states:

Disclosure should be made of contingencies and commitments of the venturer with respect to the joint ventures in which it has an investment. This disclosure would include, as appropriate, (a) the venturer's share of any contingencies and commitments of the joint venture and (b) the extent of the venturer's responsibilities in the event of a default on the part of the other venturers.

71. A survey of annual reports of 300 Canadian public companies, shows that the majority practice in accounting for interests in joint ventures in Canada is proportionate consolidation. 9/ Over the years, the use of proportionate consolidation has increased. The survey results are presented below:

Number of companies (percentage in parentheses)

	1986		1985		1984	
Proportionate consolidation	56	(70)	46	(65.72)	44	(64.71)
Equity	19	(23.75)	18	(25.71)	19	(27.94)
Proportionate consolidation; and equity	3	(3.75)	5	(7.14)	4	(5.88)
Equity; and cost	1	(1.25)	0		0	
Cost	0		1	(1.43)	1	(1.47)
Basis not indicated	1	(1.25)	0		0	
Total	80	(100)	70	(100)	68	(100)

3. Germany

72. The Third Book of the Commercial Code of the Federal Republic of Germany was added in 1985 as part of the implementation of the European Community 4th and 7th Company Law Directives. It provides that an enterprise may use proportionate consolidation to report its interest in another enterprise that it manages jointly with one or more other enterprises. If a parent company does not use proportionate consolidation, and there is evidence that this parent company or any of its consolidated subsidiaries exercises a significant influence over the operating and financial policy of a joint venture not included in the consolidation, interest in the joint venture must be included in the consolidated financial statements using the equity method.

4. New Zealand

73. The accounting standard setting body in New Zealand has issued a proposed national standard on Accounting for Interests in Joint Ventures and Partnerships. It defines a joint venture as a contractual association, other than a partnership, between two or more parties to undertake a specific business project and share any resulting output. The proposals suggest that an interest in a joint arrangement (including a joint venture) should be accounted for in accordance with its substance rather than according to its form.

5. Switzerland

74. The Swiss Accounting Standard Board (FER), in FER 2, recommends that for consolidated financial statements, interests in joint ventures should be accounted for by using the proportionate consolidated method.

6. United Kingdom of Great Britain and Northern Ireland

75. In the United Kingdom, a separate accounting standard has not been developed to deal with interests in joint ventures. Where a joint venture is not a subsidiary, it falls within the definition of "associated company", in SSAP 1: "Accounting for associated companies", provided the investor is in a position to exercise a significant influence over it. A joint venture would, therefore, be accounted for under the equity method, although the standard recognizes that non-corporate joint ventures can have features which justify proportionate consolidation of the individual assets and liabilities as well as the profits or losses. It should be noted that the Exposure Draft 50 on Consolidated Accounts, issued in June 1990 by the Accounting Standards Committee, advocates the equity method for reporting investments in incorporated joint ventures and proportionate consolidation method for reporting investments in unincorporated joint ventures.

7. United States of America

76. The Financial Accounting Standards Board (FASB) in the United States has been studying accounting for joint ventures for a number of years but has not yet reached any final conclusions. Accounting Principle Board Opinion No. 18, "Equity Method of Accounting for Investments in Common Stock" is the authoritative accounting literature on this subject. It states that "investors should account for investments in common stock of corporate joint ventures by the equity method". Often the equity method is also used for investments in non-corporate joint ventures, such as partnerships. Although most companies in the United States follow APB Opinion No. 18 and use the equity method in accounting for investments in joint ventures, particularly corporate joint ventures, other methods are found in practice. The American Institute of Certified Public Accountants (AICPA), in 1979, in an issue paper on accounting for joint ventures, presented the results of a survey of the 1977/78 annual reports for determining which methods are used in practice. 10/ The survey was conducted on 26 January 1979, on the accounting policies for investments for companies that reported investments in 50 per-cent-owned companies, joint ventures, partnerships, or undivided interests. A summary of the practices is presented below:

Size of sample:

Companies in file	4 071
Companies reporting investments in 50-per-cent-owned companies, joint ventures, partnerships, or undivided interests	415
Percentage of sample	10.2

Analysis of results:

	Responses	Percentage
Responses	422*	100
Equity method only	289	68
Equity and other methods	15	4
Proportionate consolidation	65	16
Full consolidation	35	8
Cost	5	1
Miscellaneous (not classified)	13	3

* Some companies reported using more than one method.

77. The above statistics, because of the inadequate disclosures in annual reports, do not give any conclusive picture about United States practices in accounting for interests in joint ventures. Moreover, the search results are outdated. At present, the use of proportionate consolidation method is prevalent in the oil and gas industry. This is mainly because many of these joint ventures are unincorporated entities. A number of United States venturers have indicated that they use the cost method for accounting for investments in joint ventures in Eastern Europe and the USSR.

E. Seventh Directive of the European Community

78. The Seventh Direcive of the European Community allows the use of both equity method and proportionate consolidation method for reporting investments in joint ventures. The member States may require either of the two or both.

F. International Accounting Standards Committee

79. The IASC published a new standard, IAS 31, Financial Reporting of Interests in Joint Ventures, which recommended the following treatment:

(a) Jointly controlled operations: each venturer should recognize in its separate financial statements and in its consolidated financial statements:

(i) The assets that it controls and the liabiliies that it incurs; and

(ii) The expenses it incurs and its share of the income that it earns from the sale of goods or services by the joint venture;

(b) Jointly controlled assets: each venturer should recognize in its separate financial statements and in its consolidated financial statements:

(i) Its share of the jointly controlled asset, classified according to the nature of the assets;

(ii) Any liabilities which it has incurred;

(iii) Its share of any liabilities incurred with other venturers in relation to the joint ventures;

(iv) Any income from the sale or use of its share of the output of the joint venture, together with its share of any expenses incurred by the joint venture; and

(v) Any expenses which it has incurred;

(c) Jointly controlled entities: in a jointly controlled entity, a venturer has control over its share of future economic benefits through its share of the assets and liabilities of the venture. This substance and economic reality, is reflected in the consolidated financial statements of the venturer when the venturer reports its interests in the assets, liabilities, income and expenses in the jointly controlled entity by either benchmark treatment:

(i) Including separate line items for its share of the various assets, liabilities, income and expenses of the jointly controlled entity (for example, current assets, current liabilities, property, plant and equipment, long-term liabilities, income and expenses). This method of presentation is sometimes referred to as the expanded equity method; or

(ii) Combining its share of assets, liabilities, income and expenses on a line by line basis with the similar items in the consolidated financial statements (for example, the share of the jointly controlled entity's cash balance is combined with the cash balance of the consolidated group). This method is sometimes referred to as proportional or proportionate consolidation.

80. IAS 31 permits - but does not recommend - the use of the equity method as an alternative treatment. In cases where the jointly controlled entity is acquired and held exclusively with a view to its subsequent disposal in the near future or where it operates under severe long-term restrictions, then the venturer should account for its interests as if they are investments in accordance with IAS 25, Accounting for Investments.

V. POSSIBLE CONCLUSIONS

81. After examining the foregoing report and taking into consideration the diverse nature of joint venture arrangements, the Group may wish to draw the following conclusions.

A. Definition

82. A joint venture is a contractual arrangement whereby two or more parties combine their resources to participate in an undertaking and jointly control the undertaking for accomplishing agreed-upon goals. A joint venture may take the form of a partnership, a trust, undivided interests in an undertaking, or a corporation (limited liability company). Also, joint ventures are often created in the form of a contractual arrangement for carrying out specific activities without forming a separate organizational structure.

83. Regardless of the legal form of the undertaking, the characteristics of a joint venture which distinguish it from other ways of carrying out economic activities are:

(a) The participating venturers (parties) enter into a contractual arrangement, typically a written agreement; and

(b) The joint venture participants, by that contractual arrangement (agreement), are given joint control of the undertaking which is the object of the joint arrangement.

84. A joint venture arrangement implies that "joint control" of the venture exists even if the participating venturers have unequal ownership interests in the venture. The participating parties generally decide major policies concerning the undertaking by mutual agreement. In most cases, each of the venturers possesses a "veto" power regarding the major policy decisions of the joint venture.

85. Considering the nature of joint venture arrangements, joint ventures can be classified as belonging to one of the following three types.

(a) Jointly controlled entities. Separate legal entities, they may be corporations, partnerships or any other forms of organization. The entity may be either incorporated or unincorporated;

(b) Jointly controlled operations. In these situations, no separate entity is formed. Instead, parts of the venturers' existing enterprises work on a common project and co-ordinate their activities;

(c) Jointly controlled assets. Although no separate entity is created, the resources contributed by the participating venturers are pooled together for the purpose of a joint venture project which is managed either by one managing venturer or by a joint management team, typically known as the operator. Each venturer possesses an undivided interest in these assets.

B. Accounting by joint ventures in the case of jointly controlled entities

86. The legal form of a jointly controlled entity determines the procedure of financial accounting and reporting by the joint venture. If it is a partnership, financial accounting and reporting procedure of the entity should follow the established procedure for partnership accounting. If the jointly controlled entity is an incorporated one - i.e. a corporation - its financial reporting and accounting disclosures should follow the conventional or legal requirements on corporate accounting in the country of operation. In the case of financial reporting by international joint ventures, international standards are to be taken as "benchmarks" that will be adjusted to the local accounting environment.

C. Accounting by joint ventures in the case of jointly controlled operations

87. The joint venture activities of a jointly controlled operation are delegated to the participating venturers, and each venturer carries out its part of the activities using its own resources. In this type of joint venture, no separate joint accounts of the jointly controlled operations are normally prepared. Each venturer maintains accounting records for its part of a jointly controlled operation.

D. Accounting by joint ventures in the case of jointly controlled assets

88. These joint ventures normally maintain separate accounting records of the expenses incurred for the jointly controlled assets, and the resources received from and the outputs delivered to the joint venture participants. These accounting records are maintained by the operator of the jointly controlled assets.

E. Accounting for jointly controlled entities

89. The basic issue in accounting for investments in jointly controlled entities relates to the choice of method of reporting the investments and operations in the financial statements of participating venturers. The choice of method may depend on whether the entity is incorporated or unincorporated.

90. An unincorporated entity is not usually a juridical person and therefore venturers directly and proportionately control the assets, liabilities, revenues and expenses of the jointly controlled entity. Because of that fact, it is appropriate to combine a venturer's proportionate share of the venture's assets, liabilities, revenues and expenses, with its other fully controlled assets, liabilities, revenues and expenses; this method is generally known as proportionate consolidation.

91. On the other hand, an incorporated entity itself controls the assets, liabilities, revenue and expenses since it is a juridical person. The venturers, through their joint control over the entity, exercise joint control over the assets, liabilities, revenues and expenses of the entity. However, since the venture's assets etc. are primarily controlled by the incorporated entity itself, it would not be prudent to combine a venturer's proportionate share of these items with those items which the venturer directly and fully controls. The use of the "expanded equity method" for reporting investments in jointly controlled incorporated entities would take into consideration both the substance and form of the joint venture arrangement. Under this method, a venturer presents its proportionate share of the assets, liabilities, revenues and expenses of the venture in its consolidated financial statements, but as separate line items and without combining these amounts directly with its fully controlled assets, liabilities, revenues and expenses.

92. Under the expanded equity method, the balance sheet items are shown in two separate lines - one line showing the amount representing the item directly controlled by the venturer (venturer's own and consolidated amount), and the other line showing the amount representing the venturer's proportionate share of the item in the balance sheets of the jointly controlled incorporated entities. Similarly, for revenues and expenses, the separate line items are presented in the consolidated income statement.

93. If the national law of a country recognizes a form of an unincorporated entity as a legal person and that unincorporated entity possesses most of the characteristics of an incorporated entity, joint venture participants in such an unincorporated entity may treat it as an incorporated entity for accounting and reporting purposes.

94. Some national accounting standard-setters may prefer the equity method for reporting investments in jointly controlled incorporated entities. The equity method may be used in the case where additional information disclosure is provided in the notes to financial statements on the venturer's proportionate share of assets, liabilities, revenues and expenses of the incorporated entities. Under the equity method, the venturer records its initial investment at cost and then increases (decreases) this amount by its proportionate share of profit (loss) declared by the venture. When a dividend is received by the venturer, the investment amount is reduced by the amount of dividend received.

95. The cost method of reporting investments may be used, when the interest in the jointly controlled entity is acquired and held exclusively with a view to its subsequent disposal in the near future, or when the venturer is not in a position to exercise its rightful control over an international joint venture because of

political instability, or when the venturer's ability to transfer funds from the venture to itself is significantly impaired by severe and prolonged restrictions. Under the cost method, a venturer records its investment at cost, and reports the investment as a single-line on its balance sheet. Profits earned by the venture are not recognized in the venturer's accounts until such profits are received.

F. Transactions between the venturer and the venture

96. The venturers may transfer assets to or from the joint venture or undertake other transactions with the joint venture. These transactions have implications for the recognition of profits or losses. The transfer of assets to the joint venture by a venturer as part of its contributed capital is not a sale and involves no profit and loss. However, when a venturer sells assets to the joint venture, it is assumed that the venturer is dealing with several independent parties (other venturers) and the venturer should recognize only that portion of profit attributable to the interests of the other venturers. In the case of a loss, the entire loss must be recognized since there has been an impairment of the value of the asset transferred. When a venturer purchases assets from the joint venture, it recognizes the profit or loss only when it resells them to a third party.

G. Disclosures

97. In order for the users of financial statements to obtain a clear understanding of its affairs, a venturer needs to make the following disclosures in its consolidated financial statements regarding its interests in jointly controlled entities:

(a) Accounting policies of the venturer with respect to the investments in jointly controlled entities, including the reason(s) for choosing such policies;

(b) Name of the joint venture, percentage of ownership interest, contributed and capital commitment for individually significant joint ventures or those which are publicly held;

(c) In certain circumstances, each venturer may be liable for its share of the liabilities of the jointly controlled entities, and may be contingently liable for the other venturers' share of the liabilities. Disclosures should be made on the venturer's share of any contingencies and commitments of the joint venture, and on the extent of the venturer's responsibilities in the event of a default on the part of the other venturers;

(d) If a venturer guarantees more than its proportionate share of a joint venture's indebtedness, the nature and possible financial implications of such a guarantee should be disclosed.

H. Accounting for jointly controlled operations

98. Since a venturer carries out its part of the jointly controlled operations in the same way as it would have done for its own operations, the assets employed, liabilities and expenses incurred and revenues earned in connection with the jointly controlled operations are reported as the venturer's own assets, liabilities, expenses and revenues in its own financial statements.

99. If the involvement of a venturer in jointly controlled operations constitutes a significant part of its operations, that fact should be disclosed in notes to the consolidated financial statements.

I. Accounting for jointly controlled assets

100. Each venturer includes in its accounting records its own share of the jointly controlled assets. It also records liabilities that it has incurred in raising finance for the purpose of the joint venture activity and its share of those liabilities that it has incurred or guaranteed jointly with other venturers. The income statement of a venturer includes its share of the expenses incurred by the joint venture. The revenues from the sale of a venturer's share of the joint venture's output are included in the sales revenue in the venturer's income statement. If the joint venture earns any revenue, and a venturer receives its share of that revenue, it is recognized as the venturer's other revenues.

101. If the involvement of a venturer in jointly controlled assets constitute a significant part of its business operations, that fact should be disclosed in notes to the financial statements.

Notes

1/ Michael Geringer and Patrick Woodcock, "Ownership and control of Canadian joint ventures", Business Culture (Summer 1989), pp. 97-105.

2/ J. Peter Killing, Strategies for Joint Venture Success (New York, Praeger, 1983), p. 16.

3/ Paul Beamish, Multinational Joint Ventures in Developing Countries (London, Routledge, 1988).

4/ J. M. Stopford and L. T. Wells, Managing the Multinational Enterprise (New York, Basic Books, 1972).

5/ J. L. Schaan, "Parent control and joint venture success: the case of Mexico". Unpublished doctoral dissertation, University of Western Ontario, 1983.

6/ Open meeting of the FASB Advisory Group on Joint Ventures, 4 August 1987; FASB Joint Ventures Team meetings, dated 9 September 1987, 18 November 1987, 27 January 1988, 9 March 1988.

Notes (continued)

7/ This classification scheme and description was taken from Exposure Draft 35, "Financial Reporting of Interests in Joint Ventures", of the International Accounting Standards Committee (London, 1 December 1989).

8/ IASC Exposure Draft No. 35.

9/ CICA, Financial Reporting in Canada (A Survey of Annual Reports of 300 Canadian Public Companies) (Toronto, Canadian Institute of Chartered Accountants, 1987).

10/ AICPA, Joint Venture Accounting: Issue Paper, Accounting Standards Executive Committee, Accounting Standards Division (New York, American Institute of Certified Public Accountants, 1979).

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PROGRAMME OF WORK OF THE INTERGOVERNMENTAL WORKING GROUP OF EXPERTS ON INTERNATIONAL STANDARDS OF ACCOUNTING AND REPORTING: DISCUSSION OF ACCOUNTING AND REPORTING ISSUES IDENTIFIED DURING THE EIGHTH SESSION

Accounting for environmental protection measures

Report of the Secretary-General

SUMMARY

This is the second report on accounting for environmental protection measures. It is in response to a request from the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting. In particular, the Group wanted to continue research in the area before finalizing its recommendations. The report reviews the responses to the initial recommendations by Governments, standard-setting bodies and industry. It appears that the Group has served as a catalyst for a number of national institutes and they are now examining the problems raised and solutions proposed in the first report. The Group's pragmatic approach was welcomed and subsequent research has demonstrated the practicality of the recommendations since some enterprises have already applied them without undue difficulty. This report presents the new research findings and then, based on these and the comments received, refines the original recommendations.

* E/C.10/AC.3/1991/1.

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INTRODUCTION

1. During its eighth session the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) took up the question of accounting for environmental protection measures. It was concerned by the fact that environmental expenditures and liabilities were growing in size, especially for those enterprises operating in sectors that had significant impacts on the environment. That concern was being echoed by enterprises and accounting regulators. A number of recent surveys had revealed the preoccupation of business executives with the environment. 1/ Despite the heightened awareness, the consideration of environmental issues in their annual reports was not widespread. 2/ It appeared that the absence of accounting standards allowed enterprises wide discretion in what they reported. The information given on environmental protection measures was largely descriptive and often contained no more than corporate policies or intensions. Little quantitative information was given on a consistent basis which would enable users to determine over time the impact of environmental issues on the financial position and performance of the enterprise. The shortcomings of the current laissez-faire approach had become increasingly evident in the past two years, as revealed in the Group's 1989 survey of 20 enterprises and by increased concern among accounting regulators in Canada, Norway and the United States of America. 3/

2. In the absence of comprehensive accounting standards in the area of environmental protection measures, it was not surprising that ISAR's 1989 review found that both the quality and the quantity of disclosure was quite limited. Generally, when information appeared, it was found in the board of director's report rather than in the financial statements or the notes. In addition to lack of guidance on the subject, enterprises mentioned a number of obstacles which discouraged them from taking or reporting environmental protection measures. First, there was the fact that in many countries expenses were only deductible for tax purposes when paid. As a result, there was no incentive to record liabilities. Secondly, earnings pressures were also noted. Since investors scrutinized earnings per share, enterprises put off taking measures which would reduce income. Lastly, many enterprises complained that it was too difficult to separate environmental costs from others, particularly in the case of investment expenditures. Some of the enterprises said that guidance in the area of environmental disclosure should be more specific.

3. After completing its 1989 survey and considering tentative recommendations to improve information disclosure, the Group felt that it needed more time to study the issues. In particular, it wanted to know more about the type of information enterprises were providing and their practices regarding the treatment of expenses and liabilities in the financial statements arising from environmental measures. In addition, it was interested in comments from Governments, industry and other standard setters on the desirability and practicality of the recommendations contained in the report of the Secretary-General (E/C.10/AC.3/1990/5, annex I). It was already noted that other accounting organizations were beginning to share the concerns of ISAR. It seemed as if the Group had served as a catalyst for similar research, and a number of projects which were under way are described in the current developments report (E/C.10/AC.3/1991/2).

4. The present report examines in greater depth industry practices in disclosing environmental expenditures and liabilities which result from environmental regulations and from voluntary protection measures. The exercise is motivated in part by the possibility that environmental liabilities may be systematically understated and/or that environmental expenditures may be treated as discretionary accruals. The report seeks to solve those reporting problems by proposing a series of recommendations based upon "best practice" in a number of countries. Environmental expenditures are discussed in section I and environmental liabilities in section II. Government and industry reactions to earlier United Nations recommendations are summarized in section III. An extended series of recommendations which build upon the previous recommendations are presented in section IV and some proposals for future work in section V.

I. ENVIRONMENTAL EXPENDITURES

5. One of the obstacles identified in the report on information disclosure relating to environmental measures was that the definition of environmental expenses may be vague. 4/ Many enterprises felt that it was very difficult (if not impossible) to separate environmental costs from other costs, particularly in the case of capital expenditures. That was because environmental improvements were considered to be part and parcel of any investment to replace or expand productive capacity. Segmentation of environmental expenditures was desirable since it enabled users to identify expenditures which benefited the environment. A standardized definition of environmental expenditures enabled those users to compare the disclosures across enterprises. Since there were few guidelines for calculating the costs of environmental measures, it was difficult for enterprises to present such costs in a consistent manner.

A. Survey of industry practices: developed countries

6. In the 1989 survey, some German and Swiss companies were found to be disclosing capital and current expenditures related to environmental measures in their annual reports. In order to gain some insight into how those expenditures were defined, identified and measured, the financial statements of 20 German and Swiss enterprises were reviewed in order to determine which enterprises were disclosing the information. The objective of the new survey was to examine industry practices in detail and to determine whether they were "desirable and practicable" for other enterprises. Of the 20 enterprises reviewed, seven were found to have disclosed considerable information regarding expenditures related to environmental measures. Those seven were selected for further study. They were primarily in the chemical and pharmaceutical or metal and mining industries. The study included a careful analysis of each enterprise's 1989 disclosures and a questionnaire which was completed by each enterprise and reviewed by representatives of Arthur Andersen & Co. (see annex I for details of the questionnaire).

7. The analysis revealed that in many cases, the disclosures approximated those that were suggested in the report on information disclosure relating to

environmental measures presented at the eighth session. Each of the enterprises devoted from one to three pages of its 1989 annual report to the environment. In general, the amount of disclosure was noted to have increased over the amount of disclosure included in the 1988 annual reports.

8. Additionally, the enterprises disclosed the amounts charged to operations in the current period (or multiple periods) and the amount capitalized during the year(s). The table below is an example of the extent of disclosure of current and capital expenditures of one enterprise. All of the disclosures were made in the narrative section of the annual report, as opposed to the notes to the financial statements.

Table. Current and capital expenditure for safety and environmental protection in seven selected enterprises, 1989

(Millions of Swiss francs)

	Home affiliates	Overseas affiliates	Total
Current expenditure			
Product safety	130	110	240
Process safety	90	140	230
Environmental protection (production)	200	260	460
Total	420	510	930
Capital expenditure			
Product safety	20	5	25
Process safety	40	70	110
Environmental protection (production)	180	85	265
Total	240	160	400

Note: Process safety deals with all measures taken to ensure a safe work place and to prevent accidents with their clean-up problems (spills, explosions, accidental discharges). Environmental protection measures are those taken to limit emissions during normal production operations.

9. When asked which methods were used by the enterprises to identify costs related to environmental measures, as indicated in the table, the enterprises responded that the following methods were used:

(a) Industry guidelines;

(b) Guidelines from within the enterprises;

(c) Cost-accounting for production costs, including specific identification of environmental measures in separate cost centres or general ledger accounts, allocation of costs based on percentages of total costs;

(d) Material and energy balance sheets;

(e) Environmental audits.

10. These methods are described below.

1. Industry guidelines

11. German chemical enterprises identify their environmental costs using recommendation of the Business Economics Division of the German Chemical Industry Association (Verband der Chemischen Industrie e.V.). The recommendations, originally published in 1973, are under revision. The recommendations define environmental measures and give guidelines as to how to determine the costs related to such measures.

12. The guidelines indicate that expenditures related to environmental measures should be categorized by the intended purpose of the equipment - that is, the control of air, water, waste and noise pollution. Capital expenditures for environmental measures are defined as all necessary capitalized costs for new or existing facilities that exclusively or primarily reduce damaging influences on the environment from the production facilities. Hence investments for employee protection or for the production of environmentally friendly products or packaging are excluded. Specific lists of items qualifying as environmental measures for each of the four areas considered above are included in the guidelines.

13. The guidelines state that for accounting purposes, either a general ledger account specification or statistical approximations are necessary to capture capital expenditures related to environmental measures. Since not all environmental investments can be viewed as purely related to environmental measures, estimates must be made to determine the portion of the expenditure that is related to the environment. (For example, excess costs of smokestacks or special filters in water sanitation facilities etc.) The estimates should be determined as a percentage or an absolute amount of the total amount of an investment by the planning and construction management departments. The estimates should be based on planned amounts and adjusted as deemed necessary upon review of the completed project. The recording of such investments should be assigned to an appropriate part of the accounting department - fixed asset accounting or technical investment planning.

14. The guidelines also define the operating expenses associated with environmental measures to include primarily production-related costs, and product research and development costs that are solely incurred for environmental protection (as distinct from product improvement). Operating expenses should include those costs that are identified and recorded as environmental costs as well as costs directly related to products (e.g., excess costs due to alternative raw materials being used). The cost of environmental measures include the following direct and indirect items:

(a) Personnel costs;

(b) Energy costs;

(c) Maintenance;

(d) Costs of production materials;

(e) Excess cost due to use of alternative raw materials;

(f) Interest;

(g) Depreciation;

(h) Taxes (capital, salary, property, etc.);

(i) Insurance premiums;

(j) Fees;

(k) Costs related to approvals and permits;

(l) Contributions to community facilities;

(m) Internal costs, including transport, energy, workshops etc.;

(n) Purchased services;

(o) Cost of non-production arising from the shut-down of facilities for safety reasons.

15. According to the guidelines, if costs related to environmental protection are not recorded in specifically identified accounts, estimates are necessary. A meaningful estimate should be made only in consultation with the person responsible for the cost centre.

16. The German Chemical Industry Association has also issued a form for summarizing the costs of environmental measures. The form is organized in a matrix, with four types of environmental measures: waste disposal, water pollution control, noise pollution control and air pollution control as the columns and various types of expenditures as the rows (annex II). The types of expenditures include:

(a) Property additions exclusively for environmental protection;

(b) Environmental protection portion of property additions that are not used exclusively for environmental measures;

(c) Property additions that improve the environmental impact of the production process;

(d) Total current costs of environmental protection.

17. The instructions to the form indicate that property additions must be estimated. If the specific identification of the environmental expense is not possible, then a percentage of the total property addition should be used. The percentage should be estimated by the enterprise's employee responsible for environmental activities in conjunction with the supplier of the equipment and a member of the accounting staff.

2. Guidelines from within the enterprise

18. The survey revealed that where there are no industry guidelines, enterprises had designed their own procedures for keeping track of environmental expenditures and did so on a company-wide basis. One of the respondent enterprises submitted a copy of its internal form upon which environmental protection costs are accumulated by its various subsidiaries (annex III). The form was developed over the past 15 years and separates costs as follows: capital investments; operating costs; research and development expenses; environment administration and planning; remediation measures; and recovered expenses/costs.

19. The instructions to the form tell what to include - thus:

(a) Capital investments. Include infrastructure units used 100 per cent for environmental protection (e.g., effluent plant, incinerator, controlled landfill, sewer systems etc.) and units which are part of a production unit (e.g., off-gas scrubbers, effluent pretreatment units, waste pretreatment, specific measures in a tank farm etc.). Include the relevant fraction of the total project costs;

(b) Operating costs. See guidelines for capital investments above; total operating costs include both internal and external costs;

(c) Research and development. These expenses are probably the most difficult to delimit. Judgement must be used. Generally, they are a fraction of process development which includes other goals. Reasonable estimates should be made;

(d) Environment administration and planning. These include running costs resulting from administration and planning not otherwise included above, including estimated fractions of other services (e.g. legal, data processing etc.);

(e) Expenses for remediation measures. These include old landfills, groundwater etc.;

(f) Recovered expenses. Recovered materials may include reclaimed and purified solvents, certain chemical intermediates, metals (e.g., scrap metal and/or metal-containing sludge etc.) as well as energy from incineration and heat recovery.

20. Further, the instructions state that the borderline between environmental protection and process safety is not clearly defined. The respective safety and environmental departments of the plants should be contacted for the allocation of individual items to these categories. In a general sense, process safety deals with all measures taken to ensure safe work places and to prevent accidents with their follow-up problems (spills, emissions as a result of explosions, accidental discharges) while environmental protection measures are those that are necessary to limit emissions of all types to acceptable levels during normal production operations.

3. Cost accounting for production costs

21. One of the enterprises responded that, annually, a cost accounting by cost centre was performed by the people responsible for the cost centres, using accounts that had been specifically coded as environmental measure expense accounts. Research costs for environmental measures are calculated annually by the enterprise's research department.

22. Another respondent stated that capital expenditures for environmental measures are identified by project engineers for each capital investment project. Each year the amount related to environmental measures is summarized.

4. Material and energy balance sheets

23. One firm indicated in its annual report that results of environmental protection were collected and assessed increasingly systematically by material and energy balance sheets. While such balance sheets were not directly related to financial information, they would be used to determine costs related to environmental measures.

5. Environmental audits

24. A number of the enterprises indicated that environmental audits were conducted primarily by internal departments but also by external consultants. One company mentioned that such audits had been conducted since 1981. While environmental audits were not financial audits, they might be helpful in the determination of environmental expenses.

25. One question which arises is why do German and Swiss firms disclose such detailed environmental information while enterprises from other environmentally conscious countries such as the Netherlands, Norway, Sweden, and the United States do not? Although the annual reports of enterprises in the latter countries may present much qualitative and physical information on environmental matters, it is

not translated into financial terms as in the German and Swiss reports. The detailed disclosures might be explained by a combination of factors, such as tax considerations, pressure from environmental activities, and past experience with social accounting whereby social issues are often discussed in the annual report. When questioned, they explained that since environmental expenditures were a large and growing share of their total expenditures, they felt they needed to keep track of them. Once having the information, they also claimed that the publication of this information was valuable. They received fewer questions on their environmental performance in shareholders meetings and local governments were more likely to grant approvals for their projects based on their reputation for being "open" about information disclosure.

B. Survey of industry practices: developing countries

26. A survey was undertaken in Brazil similar to the one undertaken in Germany and Switzerland. The objective was to identify methods used to report environmental expenditures and liabilities. An attempt was made to review practices at the subsidiaries of the German and Swiss enterprises and at Brazilian transnational corporations. This would cast light on whether the identical environmental reporting policy was applied by transnational corporations in both the home and host country or if it was applied selectively.

27. Ten enterprises were included in the survey: five Brazilian enterprises and five subsidiaries of the German/Swiss transnational corporations. Of the five Brazilian enterprises, four are public companies, three are State-owned and three are transnational corporations. Of the five German/Swiss subsidiaries, one is public. The only special criteria for the selection of the enterprises was that they must be large and have a significant impact on the environment. The economic sectors that have known pollution problems (oil, mining, food, metallurgy, paper, steel, pharmaceutical and chemicals) were chosen.

28. It should be noted that there are no Brazilian accounting standards specifically related to environmental measures. However, the Brazilian Securities and Exchange Commission recommends that the report of a board of directors include a description of investments for environmental protection - their objective and amount.

29. Only one Brazilian firm remained silent on the subject of the environment. Three of the other four firms had between 5 and 15 lines dedicated to the matter; one had a complete page. The enterprises usually discussed their concern with the Amazon region and compliance with governmental requirements for pollution control. None of the German and Swiss firms disclosed anything relevant in their reports, in spite of the fact that this information is disclosed in their home countries.

30. In responding to the questionnaire, four of the five Brazilian enterprises and four of the five German/Swiss enterprises said that they segment environmental expenses from other expenses, allocating them to specific cost centres. Normal cost accounting methods are used in the process. The same treatment was given to accounting for investments. One subsidiary used the format developed by the parent

company to estimate its environmental costs. Only one enterprise in each group did not segment investment expenditures.

31. Two of the Brazilian enterprises and two of the German/Swiss enterprises did not specify what kinds of costs are included in the environmental expenditures. The other companies said expenditures for water treatment, waste gas and air treatment, and solid waste treatment include labour costs, social charges and materials. The German/Swiss enterprises gave more details, mentioning wages and charges, depreciation, energy, materials, scientific instruments, laboratory costs, administration and planning etc. None of the enterprises disclosed the segmented information on environmental expenditures.

32. When discussing the advantages of preventive measures vs. cleaning up later, the Brazilian enterprises responded that they were motivated by avoiding higher future costs, creating a positive image and protecting employees' health in order to maintain productivity. The German/Swiss enterprises mentioned lower prevention costs compared to remediation costs, and keeping a positive image. In addition they said that if they did not incur prevention costs, their chances of remaining a "going concern" were jeopardized.

33. All 10 enterprises reported that current and capital environmental expenditures were undertaken largely to comply with environmental regulations and not on a voluntary basis.

34. In sum, most of the enterprises have voluntarily developed specific accounts for environmental expenses and investment, in order to keep track of measures taken to benefit the environment. The fact that they do not disclose this information is probably because it is not required and because pressure from environmental activists is not sufficiently strong, even though the firms are preoccupied with their image. Alternately, financial reports may not be seen as a means of promoting that image.

C. Conclusions

35. The results of the survey of industry practices demonstrate that accounting for environmental expenses is feasible. Some practices have been in effect for many years, and they are straightforward, practical and time-tested. The difficulties of definition and allocation of expenses to different accounts, raised in the 1989 survey, have not posed insurmountable obstacles, provided use is made of non-accounting personnel with the appropriate technical expertise. While environmental expenditures are capable of definition, that definition is likely to be arbitrary. Ultimately, a judgement must be made as to the items which constitute environmental expenses. There is probably broad agreement that all expenditures to limit emissions of all types to acceptable levels during normal production operations should be considered "environmental expenses". The question which then arises is should this category of expense also include employee protection and safety; production of more environmentally friendly products; use of more environmentally friendly raw materials; accident prevention and process safety; and costs associated with accidents that do take place.

36. The development of an appropriate series of accounts to accumulate these expenses would certainly include accounts specified by the nature of emissions (air, water, land, noise). Such a series of general ledger accounts might include as a minimum:

(a) Liquid effluent treatment;

(b) Waste gas and air treatment;

(c) Solid waste treatment;

(d) Analysis, control and compliance;

(e) Remediation;

(f) Recycling.

Since these expenses are incurred under normal operations, they are relatively easy to identify, estimate and keep track of. Problems are likely to arise if attempts are made to broaden the category and to include additional environmental measures. It is necessary to develop some guidelines regarding items which should be included in order to avoid extreme situations where either nothing is reported or all types of expenses are reported under the guise of environmental protection.

II. ENVIRONMENTAL LIABILITIES UNDER UNCERTAINTIES

A. Survey of industry practices

37. The reporting issues associated with environmental expenses are tractable and are essentially of a definitional and classificatory nature. Unfortunately, environmental liabilities have proven considerably more problematic. Many enterprises surveyed in 1989 and 1990 acknowledged that environmental liabilities existed but were uncertain as to how they might be included in financial statements. The main difficulty was arriving at a "reasonable estimate". The aim of this section is to identify the stage at which a reasonable estimate should be feasible.

38. While the various enterprises surveyed were very open with regard to current costs and capital costs, in the area of accrued liabilities with regard to environmental measures, they were (predictably) reticent. In general, future obligations are recorded as liabilities when a legal obligation (via statute, assessment or otherwise) to remedy an existing situation has been determined. Because of the inherent uncertainties in future legislation, technological change and extent or nature of environmental cleanup required, long-term accrued liabilities are often difficult to determine and calculate.

39. One of the surveyed firms indicated that it estimates the likelihood and cost of cleanup of sites where its United States subsidiaries have been identified as "potentially responsible parties" by the Environmental Protection Agency.

40. While none of the enterprises indicated what their liabilities related to environmental expenditures totalled, one enterprise indicated that its liabilities did not exceed 20 per cent of its annual environmental expense. One of the respondents disclosed in its annual report liabilities related to the disposal of nuclear waste and the restoration of terrain due at the completion of coal mining activities.

41. Three Brazilian firms stated that they did not make provisions for current or future liabilities unless they were involved in a law suit. The same situation prevails generally with the German/Swiss subsidiaries. Only two make provisions for contingent liabilities, but they did not describe the basis on which they do so.

42. Equally, regulatory bodies have had considerable problems with respect to these liabilities. Essentially, the problem revolves around whether the liability to engage in clean-ups or remedial action is identical to other types of contingent liabilities or whether environmental liabilities represent a particular problem. It would seem that in North America, there is some agreement that environmental liabilities are worthy of special attention. The Canadian Institute of Chartered Accountants noted that there may be potentially significant contingent liabilities arising, some of which may be unrecognized and undisclosed. The fact that the current accounting standard was not written in contemplation of the type of massive environmental restoration costs currently facing some entities may be contributing to inadequate accounting. It recommended that provisions are needed to accrue the liability for future removal and site restoration costs, when the likelihood of their occurrence was established as a result of environmental law contract or because the enterprise had established the policy to restore a site.

43. The matching principle would require that the costs of remediation should be matched with the revenues associated with the products which gave rise to the wastes during production. In practice, matching is likely to prove difficult owing to a variety of technological and legal uncertainties in arriving at a "reasonable estimate" of the amount of the liability. The issue revolves around identifying the critical point at which a "reasonable estimate" is possible.

B. Identification and estimation of environmental liabilities

44. In order to identify steps or procedures which could be taken to identify and quantify liabilities, an example was developed based on the clean-up of waste. Inevitably, all production is likely to generate some waste. In the figure the main steps associated with the disposing of existing stocks of waste are outlined. The greatest concern is likely to be with wastes that are not recycled, exceed the assimilative abilities of the environment and have a direct effect upon biota and human beings.

45. Apart from determining the substances which are likely to be hazardous to either biota or humans, the enterprise must make some determination as to what quantities of the substances are harmful. In many respects this is one major obstacle to reporting liabilities. Knowledge at one point in time may dictate that a stock of waste in a firm is not harmful; many years later, it may emerge that the waste was indeed harmful and that it constituted a public danger.

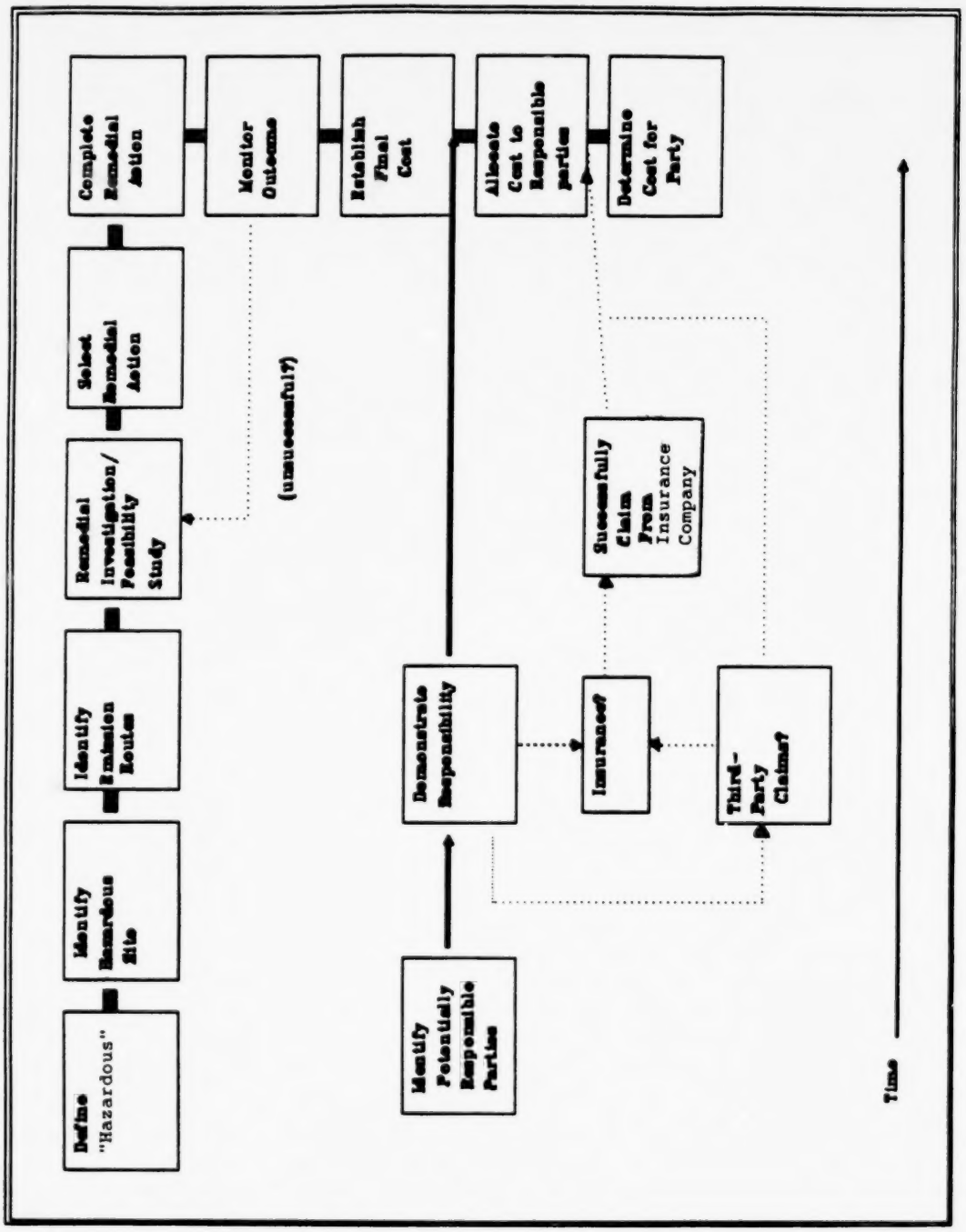

Figure. Steps in disposing of waste and recognizing liabilities

46. The next problem is to determine the extent of contamination and the possible remedies, which may include landfills, underground injection, incineration and biochemical techniques. Over time, as these technologies emerge and develop, their costs change.

47. A feasibility study is normally undertaken by the enterprise. It includes a thorough specification of the nature of the contamination and a series of remedial alternatives, ranging from "quick and dirty storage" to those which go beyond compliance. At this stage, costs should also be attached to the range of alternative remedial actions.

48. Numerous uncertainties arise from the difficulties associated with defining and identifying the emission sites and routes associated with hazardous wastes and with taking remedial action. Technological uncertainties make the extent of the contamination and final cost of remediation difficult to calculate. Legal uncertainties give rise to problems associated with the determination of how the costs are apportioned and to whom they should be apportioned. Regulatory uncertainties compound the problems of waste, because regulatory agencies may have considerable leeway in determining the degree of enforcement, and that leeway may change over time. Remedial solutions that were considered acceptable as effective in one instance may cease to be acceptable as effective in another. Moreover, legislators may alter the amount of pressure exerted upon agencies over time and may enact new regulations which change the scope of the problem.

49. In a world of such uncertainty, there is a case to be made for accounting on a pay-as-you-go basis, since it could be argued that the inclusion of these contingent liabilities in the financial statements might distort the financial position of an enterprise. However, excluding them from the financial statements is equally dangerous for a number of reasons:

(a) Stockholders might attempt to impound an estimate of the liabilities into stock prices;

(b) Shareholders might attempt to litigate for failure to disclose;

(c) Lack of a policy on liabilities under uncertainty will cause subordinates not to bring environmental problems to the early attention of senior management;

(d) A corporate image of secrecy and irresponsibility can result.

50. Some argue that the disclosure of these liabilities might prejudice legal proceedings and encourage actions by affected parties. This could be mitigated if disclosures are limited to the aggregate environmental liability.

51. It would seem that a reasonable estimate should be possible once a feasibility study has been completed. At this stage one would expect that the most likely estimate would be the most appropriate number to accrue. The completion of a feasibility study would seem to mark a critical point, after which estimates (other than the lowest in a range) should be accrued in the financial statements. It might be noted that this approach is used by some environmental risk insurance providers.

52. It should be noted that some regulatory authorities have given additional guidance in the cases where there is a legal responsibility to clean up a waste site. For example, since May 1989 the United States Securities and Exchange Commission requires management to take the following steps in the case of liabilities to remedy hazardous waste sites when they prepare Management's Discussion and Analysis of Financial Condition and Results of Operations:

(a) Determine whether an event is not likely to occur; if it can be determined that an event is not likely to occur, no disclosure is necessary;

(b) If that determination is impossible, then management must objectively evaluate the liability on the assumption that it will come to fruition. Disclosure is then required unless it can be determined that a material effect on the condition or results of the corporation is not reasonably likely to occur;

(c) The latter determination must be objectively reasonable when viewed at the time the determination is made.

53. Management should quantify these liabilities to the extent "reasonably practicable".

54. In practice these guidelines could result in a far greater degree of disclosure than under existing accounting standards, since they require enterprises to prove a negative. Such negative determinations may be difficult to make, especially because of the significant uncertainties that exist. However, this interpretive release eliminates some of the ambiguity associated with existing pronouncements.

55. Consistent with the foregoing approach, accounting and law firms are advising their clients to gather information to develop, if possible, a realistic range of losses based on reasonable "best case/worst case" scenarios. Once such a range has been developed (whether for "losses" or remediation costs), the most likely amount in the estimated range should be charged to current earnings if the loss is probable. If no one amount can be considered most likely, the company should charge the minimum amount in the range to earnings and should explain in the footnotes the rationale used to develop the estimated range of exposure and the range itself.

C. Conclusions

56. Enterprises in the survey record future obligations as liabilities when there is a legal obligation to do so. However, because of technological, legal and regulatory uncertainties, long-term accrued liabilities are often difficult to determine and calculate. The lack of disclosure might be due to the uncertainties surrounding such liabilities. If one considers the nature of environmental liabilities, there are a number of characteristics which increase their uncertainty and size. They are extremely complex, long-term, affect a large number of humans and biota, are synergistic and are sometimes irreversible. The difficulties caused by these uncertainties are real but some attempt must be made to deal with them,

just as in the case of other contingent liabilities (for example, pension costs and warranty expenses). Consequently, some accounting authorities have felt it necessary to give additional guidance. In the case where a legal obligation to clean up exists or where the enterprise has decided to clean up, a reasonable estimate of the liability should be possible before actual clean-up takes place and costs are incurred. In many cases this determination can be made after the completion of a feasibility study of alternative remediation techniques.

III. RESPONSE TO THE RECOMMENDATIONS FOR INFORMATION DISCLOSURE

57. During its eighth session, the Group requested that Governments, other standard-setting bodies, industry organizations and other interested groups give consideration to the desirability and practicality of providing the type of information recommended in the report of the Secretary General (E/C.10/AC.3/1990/5). That information was split into two parts. Part A pertained to information disclosure relating to the enterprise's environmental policy and performance in the report of the board of directors. Part B was more specific and covered disclosure which is needed in the notes to the financial statements and included amounts charged in the current period and amounts capitalized, recognition and booking of liabilities.

A. Governments and standard-setting bodies

58. Almost all of the Governments commenting on the recommendations in the report of the Secretary-General were in agreement. In particular, they thought that enterprises having an impact on the environment should disclose their environmental policies and programmes in the board of directors' report. Some stated that they did not see any difficulties or problems for enterprises if the recommendations were adopted and, furthermore, they were considering incorporating them into national regulations. The view was that the recommendations would enable an enterprise to establish that it was operating in a responsible manner in a country, even in the absence of formal environmental legislative enactments requiring disclosure of such information. Only one Government thought that the scheme might be too detailed. In answering related questions on environmental reports required by the Government and fiscal incentives for environmental protection, it appears that reporting requirements are rather underdeveloped in countries which do not have environmental protection legislation. However, since almost all Governments were anxious to protect the environment, many were providing tax incentives (tax credits, accelerated depreciation) for environmental expenditures. This is not surprising since, although all countries have well established tax laws and authorities to enforce them, many countries do not have environmental laws and enforcement mechanisms. It should be noted that even where there are extensive requirements, users of financial statements do not necessarily have access to government reports in a form usable for their purposes.

59. One standard-setting body noted that existing international standards require disclosure of accounting policies. However, diverse policies are now being used to account for like events. This produces significantly different sets of financial

statements based on the same events and conditions. Some would argue, therefore, that the disclosure of accounting policies for environmental protection measures would only be necessary if diverse practices currently exist. As has been seen in the section above, only a small number of enterprises actually disclose information on environmental expenditures and liabilities. The majority report neither the actual data nor their accounting policies regarding their calculations.

B. Industry

60. It would be safe to say that there is no uniform industry view of the recommendations. The responses ranged from complete agreement - a number of enterprises said that they were already following such practices and that others should do so - to complete disagreement - some argued that existing standards are sufficient. Some companies thought that the information to be included in the report of the board of directors might be too voluminous, was really social information and belonged in a separate report. Enterprises originating in countries where such disclosure very often appeared in the board's report replied that most of the recommendations were already in practice.

61. Regarding information to be disclosed in the notes, some enterprises said that segmentation of expenditures (current and capital) was a standard procedure and that they had been doing it for years, although they generally disclosed it in the board of directors' report. Others from the same industry said that segmentation was too complex and arbitrary. Still others thought that there was a lack of guidelines on when and how to segment expenditures and when and how to accrue contingent liabilities. A number of enterprises thought that the current rules were sufficient for the recognition and booking of liabilities.

62. As was seen in section II, some of the enterprises surveyed are reluctant to recognize such liabilities owing to the uncertainty of the amount, even when they are relatively certain that a liability exists. They are not alone in this reluctance. For example, in the United States some chemical companies have been identified as "potentially responsible parties" at up to 100 sites. But there is uncertainty as to whether they will ultimately be found to be the responsible party. Added to this are the technological problems of specifying the cost of clean-up. Thus, it is difficult to quantify these liabilities. Under present international accounting standards, a contingent liability should be accrued if the loss is probable and can be reasonably estimated. Disclosure should be made if either of these conditions is met, unless the possibility is remote. Since some enterprises have had difficulties applying this standard, United States regulators have clarified what constitutes an uncertainty and the obligation to report under these circumstances.

IV. RECOMMENDATIONS FOR BETTER ACCOUNTING AND REPORTING FOR ENVIRONMENTAL PROTECTION MEASURES

A. Recommendations for the report of the board of directors

63. The Group agreed during its eighth session that environmental protection measures are an important matter and that an enterprise should include at least a description of their environmental policy, programmes and achievements in the report of its board of directors. A reference to a more limited disclosure was made in the Group's 1989 conclusions on the content of the board of directors' report. The present recommendations are more comprehensive. The United Nations survey of industry practices, both in 1989 and 1990, found that some enterprises routinely included environmental information in the report of the board of directors. Some enterprises did this on a very systematic basis. They included in their narratives details on environmental expenditures, both current and capital. Further investigation revealed that the methods they used to segment the expenditures had been in use for a long time, were well-developed and were straightforward even for a complex industry such as the chemical industry. Thus, one could conclude that the methods were practicable. In the light of the 1989 and 1990 findings, the Intergovernmental Working Group may wish to consider the recommendations outlined below for the report of the board of directors. These recommendations pertain to enterprises that have a significant impact on the environment.

64. The report of the Board of Directors/management discussion and analysis should set out the following, when relevant:

(a) The type of environmental issues that are pertinent to the enterprise and its industry;

(b) The formal policy and programmes that have been adopted by the enterprise with respect to environmental protection measures (if no formal policy and programmes exist, it should be stated);

(c) The improvements in key areas that have been made since the introduction of the policy, or over the past five years, whichever is shorter;

(d) The environmental emission targets that the enterprise has set for itself, and how the enterprise is performing relative to those targets;

(e) The extent to which environmental protection measures have been undertaken due to governmental legislation and, if so, the extent to which governmental requirements (for example, a timetable for the reduction of emissions) are being achieved;

(f) Any material proceedings under environmental laws; management should disclose a known potentially significant environmental problem unless it can objectively conclude that the problem is not likely to occur or, if it does, that the effect is not likely to be material;

(g) The financial or operational effect of environmental protection measures on the capital expenditures and earnings of the enterprise for the current period and any specific impact on future periods;

(h) When material, the actual amount charged to operations in the current period, together with a description of the environmental measures to which they relate. This amount might be subdivided into the following general ledger accounts:

(i) Liquid effluent treatment;

(ii) Waste gas and air treatment;

(iii) Solid waste treatment;

(iv) Analysis, control and compliance;

(v) Remediation;

(vi) Recycling;

(vii) Other (for example, accidents, safety etc.);

(Where it is not possible to segregate the amount that relates to environmental protection measures, this fact should be stated.);

(i) When material, the actual amount capitalized during the current period, the accumulated amount capitalized to date, and the period for amortizing, or writing off, such amounts, together with a description of the environmental measures to which they relate. This amount might be subdivided into the categories listed in (h). (Where it is not possible to segregate the amount that relates to environmental measures, this fact should be stated.)

B. Recommendations for the notes to financial statements

65. During its eighth session the Group was concerned about the recommendations for disclosure in the notes to financial statements, particularly those for accounting policies. Since such disclosure would be automatically included under existing international standards, a number of experts thought the requirement could be dropped. Consequently, the list for disclosure has been considerably reduced and includes only identified problem areas where additional guidance seems necessary. Thus, the Intergovernmental Working Group may wish to consider the following recommendations outlined below.

66. The accounting policy notes should describe the policies adopted in accounting for environmental protection measures in, for example:

(a) Recording liabilities and provisions;

(b) Setting up catastrophe reserves (through appropriations of retained earnings);

(c) Disclosure of contingent liabilities.

67. When material, the following amounts should be disclosed in the notes, together with a description of the environmental measures to which they relate:

(a) Liabilities, provisions and reserves that have been set for the current period, and amounts accumulated to date;

(b) Contingent liabilities, with an estimate of the amount involved, unless the event is not likely to occur. The possible loss should be quantified to the extent reasonably practicable. If the possible loss cannot be reasonably calculated, a description of the contingent liability should continue to be furnished and the reason should be given why an estimate of the amount of the loss cannot be made. Completion of a feasibility study of remediation costs may be normally considered as the latest date at which a reasonable estimate of the liability is possible.

V. RECOMMENDATIONS FOR FURTHER STUDY

68. This report has examined industry practices in recording environmental expenditures and identified the difficulties in recognizing environmental liabilities under conditions of uncertainty. It has suggested broad guidelines for recording expenditures and procedures which could be used to decide when liabilities should be recognized. Obviously, more work needs to be done in this area, and the Group may wish to consider the following topics as well as propose others:

(a) Development of more explicit guidelines and prototype lists of items which should be considered as environmental expenditures;

(b) Further study of techniques for estimating environmental contingent liabilities under uncertainty;

(c) Impact of recent additional guidance on reporting environmental contingent liabilities;

(d) Recognition of the impairment of long-lived assets arising from environmental degradation and their related indemnities, if any;

(e) Methodology for including the impairment of natural and environmental resources in the financial statements, including natural resource accounts.

69. The first three topics come out of the present investigation which underlies this report. Work under (a) could contribute to "comparability" in disclosure across countries by developing a standard list of environmental expenses. Regarding (b), it appears that the preparers of financial statements have little experience using estimation techniques for environmental liabilities. They might benefit from a description of available techniques along with their advantages and disadvantages. A recent study confirmed this and noted that while most companies

understood the probabilities of their own environmental incidents (discharge, compliance, failure, emergencies), they lacked tools to assist in measuring potential liabilities in order to make appropriate management decisions. If additional guidance solves the current reporting problem of contingent liabilities, it might be considered for inclusion in existing standards. The impact of this additional guidance on disclosure could first be evaluated under (c). During the course of this report, it was not possible to discuss related issues in (d) - such as the impairment of long-lived assets - but guidance is probably needed in this area.

70. There are some accounting experts who believe that present accounting concepts and systems are insufficient to deal with environmental concerns and that a new accounting framework must be developed which would redefine asset and liability boundaries. 5/ Work could be undertaken on extending those boundaries and applying approaches now used in national income accounting, as described in (e). Since the bulk of economic activity and therefore the greatest environmental impact derives from corporate activity, it seems essential to try to incorporate those concepts into corporate accounting. Environmental economists currently distinguish between man-made capital, substitutable natural capital, critical natural capital (which cannot be substituted for or replaced once depleted). Accounting currently recognizes only the "priced" elements of these. Efforts are under way to develop a "shadow" accounting system for corporations so that they can trace diminutions in natural capital. The basic aim would be to produce a very rough estimate of the sustainable cost of their activity - that is, to recognize, but not to book, the costs of restoring the environment after each action - in order to inform managers and external shareholders of the extent to which current prices underrepresent the actual costs of production. The design of this new accounting system would be experimental in character and would be undertaken to explore the feasibility of such an approach, rather than to make any specific recommendations at this stage.

Notes

1/ The World Economic Forum found that 650 executives considered the environment the most important challenge affecting business during the 1990s. This view is reiterated by that of 87 per cent of the finance directors polled in the United Kingdom by Coopers & Lybrand, who saw environment as a significant issue for their business. Fifty-five per cent believe it raises financial concerns for their companies. They have discovered the need to change their approach and resource allocation not just because it is good for the environment but because it is good for business. Specifically, some enterprises are changing the way they view environmental expenditures from an "expensive annoyance" to a normal "cost of doing business" and to an "essential component" of a healthy corporate image".

2/ Only 27 per cent of the United Kingdom enterprises in the 1990 Coopers & Lybrand survey reported anything on the environment in their annual reports.

3/ For example, the amended Enterprises Act of Norway (1989) requires the inclusion in the board of directors' report of physical information regarding emissions and contamination and details about environmental measures planned or

performed to clean up the environment. In the United States certain environmental disclosures must be made in the narrative portions of Securities and Exchange Commission filings. The Securities and Exchange Commission Regulation S-K Item 101 requires enterprises to disclose the material effects that compliance with environmental laws may have on capital expenditures, earnings and competitive position. Item 101 requires disclosure of certain existing estimates of current and future environmental expenditures. Under Regulation S-K Item 103, a corporation must disclose significant environmental, administrative or judicial proceedings (both contemplated by the Government and pending) that will have an impact on it. In addition the Securities and Exchange Commission has informed corporations that it also expects to see environmental liabilities addressed in the narrative discussion of financial conditions known as Management's Discussion and Analysis of Financial Condition and Results of Operations. In Canada the Ontario and Quebec Securities Commissions require listed companies to include the financial or operational effect of environmental protection requirements on the capital expenditures, earnings and competitive position of the Issuer for the current fiscal year and any expected impact on future years. The Canadian Institute of Chartered Accountants recently approved an accounting standard on capital assets which requires that provisions be made for removal and site restoration costs. The Canadian Standards Committee decided to proceed with issuing this standard in view of the potential magnitude of the costs and so as to achieve some consistency in practice.

4/ The report (E/C.10/AC.3/1990/5) specified a series of measures that could appropriately be considered environmental expenses.

5/ Rob Gray, The Greening of the Accountancy: The Profession after Pearce (London, Chartered Association of Certified Accountants, Research Report No. 17, 1990); and Dan Rubinstein "Bridging the gap between accounting and black ink", paper prepared for the London School of Economics Workshop on Green Accounting, London, December 1990.

Annex I

QUESTIONNAIRE FOR THE SURVEY OF INDUSTRY PRACTICES

1.1 How do you separate environmental costs from other kinds of expenditures?

Do you have guidelines for such identification of environmental costs? If so, please send us a copy.

1.2 What types of costs/expenditures are included as "expenditures for environmental measures"?

1.3 Are such costs compiled through the accounting system?

2.1 Do you currently capitalize investments for environmental measures?

2.2 Are accruals established for costs related to improvements in the environment?

2.3 Upon which basis do you estimate such costs?

3.0 What guidelines do you use to budget your investment and expenditures related to protection?

4.0 What techniques do you use to estimate current and future liabilities?

5.0 Do you conduct environmental audits using either internal or external qualified auditors?

6.0 How have your accruals and expenditures for environmental measures changed since 1987?

Please compare your total environmental accruals at year-end with your total environmental expenses for each year from 1987 through 1989.

7.0 What impact do fiscal incentives/disincentives (e.g., tax regulations, tax credits, accelerated depreciation, government grants etc.) have on environmental protection expenditures or on accounting for environmental measures?

Annex II

COMPOSITION OF ALL EXPENDITURES/COSTS OF THE CHEMICAL INDUSTRY FOR ENVIRONMENTAL PROTECTION IN FISCAL YEAR 1989*

(Thousands of DM)

Company: Person working on this questionnaire: Phone No.:	Turnover for the year ____
Number of employees in classes: I /_____/ II /_____/ III /_____/ IV /_____/ 1-49 50-199 200-999 over 1,000	All company's investments in tangible assets (property)

Property additions for pollution control (investments) bought; self-constructed properties and properties under construction at this time.

	Expenditures for the types of environmental measures			
	Waste disposal	Water pollution control	Noise pollution control	Air pollution control
1. Property additions exclusively for environmental protection				
a. Built up areas, buildings and building improvements - building-related costs				
b. Land and land improvements				
c. Machinery and equipment				
2. Environmental protection of property additions that are not used exclusively for environmental measures				
3. Property additions that improve the environmental impact of the production process (Product-related investments) Only investments due to laws or governmental advice				
Property additions for environmental protection (1+2+3)				
Total current costs of environmental protection (including fees, subscriptions and prohibitions, subsidies from Government)				

Source: Association of the Chemical Industry Department: Taxes, Finance, Economics and Business Administration.

* Sample questionnaire.

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Annex III

INVESTMENTS AND EXPENDITURES FOR ENVIRONMENTAL PROTECTION*

Group company: _____ Site: _____

Currency: _____ Units: _____ Year: _____

A.	Capital investments	
1.	Effluent treatment, aqueous	.....
2.	Waste gas and air treatment	.....
3.	Solid waste treatment	.....
4.	Analyses and controls, instruments, laboratories	.....
5.	Others (specify - e.g., recycling)	.....
	Total investments	
B.	Operating costs	
1.	Effluent treatment, aqueous	.....
2.	Waste gas and air treatment	.....
3.	Solid waste treatment	.....
4.	Analyses and controls, instruments, laboratories	.....
5.	Others (specify - e.g., recycling)	.....
	Total operating costs	
C.	Research and development expenses	
1.	Process development of production process	.....
2.	Process development, waste elimination process	.....
3.	Others (specify)	.....
	Total research and development	
D.	Environment administration and planning	
E.	Remediation measures	
F.	Recovered expenses/costs	
1.	Value of recovered materials	.....
2.	Value of recovered energy	.....
3.	Services rendered to third parties	.....
	Total recovered	

* Sample form.